

"The stupidest ***** brand strategy in the history of marketing"

Scott Galloway, Professor of Marketing, NYU, Stern School of Business, on Twitter becoming "X"

Totally agree Prof G. With all its misgivings, the little bird is on the bottom of virtually every web site, email, blog and newsletter. 'Tweeting' is over! What an astonishing way to demolish a brand.

Anniversary time. Three years ago, after an exceptional twenty-one years at Cisco who I still deeply admire, Bloch Advisory began. Good move?

Absolutely! It's been an amazing ride and a perfect change. For example, here is some recent client news:

- **Tesserent (Cybersecurity services)**: three months after our engagement, its shares climbed 145% after Thales offered to buy them for \$176m million. Well done Tesserent. <u>LINK</u>
- Canopus (Telco UX Insights):
 - awarded a A\$2 million research grant from the Australian Government's Cooperative Research Centre Project (CRC-P). The grant will support the project titled "Growing Australia's Cloud Gaming Industry with AI-Assisted Network Boost."
 - investment by US-based Konvoy Ventures which takes Canopus' Series A funding round to A\$15.7 million (US\$10.5 million), allowing Canopus to accelerate growth in international markets. <u>LINK</u>
- Oreta (MSP): short-listed for an industry award for their Glance-X product that provides 'at-a-glance' insights of infrastructure cost and performance. Developed entirely by Oreta. LINK

Business, Strategy and Sales Planning – our assistance in business planning has proven popular with technology business clients large and small, private and public.

Having been involved in hundreds of planning sessions over many years, some good and some, not so much (!), inevitably one learns a thing or two. We pack the good stuff into a few days and deliver a sharp focus on investment and divestment and powerful outcomes.

If you feel we can assist your organisation, please contact us.

Telco partnerships with LEO satellite providers have featured strongly recently. In this newsletter, we ask "why the fuss?" as well as review Microsoft's US\$154 billion pop in a day. Is it hype or a realistic glimpse into what's ahead?

Previous Newsletters, including this one, are available on our site in pdf HERE

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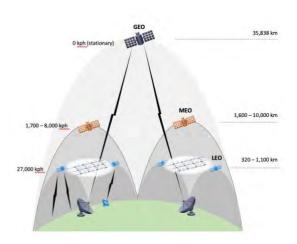


LEO satellites – why the fuss?

Satellites, in particular LEOs (Low Earth Orbit) satellites, have attracted an extraordinary amount of attention lately. Telstra, Optus and Vocus each announced agreements with key players such as StarLink, OneWeb, Lynk (see table at end).

As of May 2023, there are an estimated 8,261 satellites orbiting Earth - 4,852 are active and 3,409 are inactive. Five years ago, there were less than 500 LINK. Growth is expected to continue to accelerate. The top 5 countries with the most satellites are: US (2,804), Russia (1,449), China (1,331), India (482) and France (257).

The following table and the diagram above provide background information on the different types of satellite technologies.



TYPE	Description	Height (km)	Latency (mSecs)		Applications	Advantages	Disadvantages	Some Key Providers
GEO	Geostationary Earth Orbit	35,786	240	3.07	Communications, broadcasting, weather, military	Constant coverage, larger footprint/coverage	High latency, limited bandwidth, higher signal power, high cost launch & op	Intelsat, SES, Eutelsat
MEO	Medium Earth Orbit	2,000- 35,000	50-150	3-8	GPS, navigation	Better accuracy & coverage than LEO, lower latency than GEO	High launch cost than LEO, latency	O3b (SES), OneWeb, Viasat
LEO	Low Earth Orbit	600-1,200	1-50	7-8	Communications, observation, remote sensing	Low latency, higher bandwidth, lower launch op cost, constellation	Shorter comm windows, requires large number, complex tracking/handover	SpaceX Starlink, Amazon Kuiper, OneWeb, Boeing

So what? Satellite is another form of wireless communication providing all the benefits of wireless, with some limitations. It has been deployed for decades, primarily to provide connectivity to difficult-to-reach, remote locations. This could be on land (deserts, mountains, farms, battlefields), at sea (ships, cargo vessels) or in the air (aircraft, fighter planes, drones). When nbn was first conceived, it targeted the 8 percent of Australia which will never have wired access with the use of satellite.

What has changed? Two developments have accelerated the use of satellites:

- **Rocket re-use**: rockets can be re-used and re-launched thus lowering the cost of satellite deployment into space by orders of magnitude.
- **LEO technology:** LEOs are much smaller, lighter and lower in cost than their siblings. GEO satellites cost hundreds of millions of dollars and weigh hundreds of kilos, whereas LEOs can cost less than a hundred thousand dollars and weigh only tens of kilos. Many more LEOs are required for coverage, however the costs are still significantly less.

What else has changed? Consequentially, control and ownership of satellites has shifted from government (public sector, defence) to private industry, which has created a more competitive, innovative market. Demand for internet connectivity has exploded in terms of both access (from remote locations) as well as bandwidth. While demand has escalated, the cost of providing high speed, low latency connectivity from space has plummeted thereby enabling satellite to become a much more attractive commercial and technical proposition.

"Voice calling is coming. It's coming to Australia, it's coming to New Zealand, it's coming to the entire planet"

Charles Miller, CEO Lynk Global, CommsDay 26/7/23

While global 5G mobile connectivity expands in coverage, uptake and capability, the next breakthrough is the

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provision of voice calling directly to these consumer-based mobile handsets via satellite. This is difficult enough via on-land infrastructure. It is not hard to imagine how hard it is to provide equivalent connectivity and capability via a LEO satellite hurtling past, 600 km above earth, in less than two minutes!

However, satellite-to-phone services are on their way according to vendors. Lynk Global recently demonstrated voice calling with standard handsets using its LEOsats as base stations. It was limited to two minutes, but Lynk is confident this limitation will be overcome with plans to add thousands more satellites by 2025.

The following table is a summary of some recent announcements by leading Australian telcos:

Telco	Partner	Announcement	Date	Source	Ref
Optus	Starlink	To deliver 100% mobile coverage across Australia. SMS late 2024, voice and data in late 2025	13/7/23	Optus	1
	Lynk	Joint live demonstration of satellite direct-to- mobile technology	21/11/22	Optus	2
Telstra	Starlink	First provider in the country, and the world, to establish a deal providing broadband and voice services with Starlink in rural Australia.	3/7/23	TheAust	3
	OneWeb	Migrating hundreds of existing remote mobile base stations currently using satellite backhaul to OneWeb's LEO solution from later this year	19/6/23	OneWeb	4
Vocus	Starlink	To offer Starlink Business, powered by LEO satellites, to Australian enterprise and government customers.	30/11/22	Vocus	5

Links: (1) (2) (3) (4) (5)

Perspective: The recent advent of LEO satellites, yielding improved performance at much lower cost than its older siblings, is of major significance to the telecommunications industry and almost ninety percent of the earth's surface that has no internet access.

It will accelerate mobile and wireless adoption.

However, there are several challenges ahead. It is still early days for the adoption and standardisation for Non-Terrestrial Networks (NTN). Currently, providers are using 3GPP pre-release 17 or proprietary technology. Release 18 is only expected after March 2024 LINK. A new ecosystem supply chain needs to be developed and the technical challenges related to LEOs mentioned above, are significant.

While the telcos are ambitiously marking their territories and announcing relationships, my perspective is:

- Is LEO a significant part of their business? No, it is relatively small.
- Key attraction of LEO? It's wireless. It's an increasingly strong alternative access to nbn especially for remote access
- Timing? Realistically, light usage in 2024, with more significant development in 2 years plus

Microsoft pops - US\$154 billion in a day, with AI update

On July 18th, Microsoft announced pricing for Copilot (\$30 per user per month for Microsoft 365), expansion of Bing Chat Enterprise (Al-powered chat for work) and a new Visual Search capability for Bing Chat.

That day, at its peak, it added US\$154 billion to its market cap. That's almost 130 percent of the market cap of CBA or the market caps of ANZ, NAB and Westpac banks combined!

Unsurprisingly, many businesses are sceptical about the importance of AI and associated tools like ChatGPT and



BARD. The unbelievable example above only adds to the hype surrounding AI.

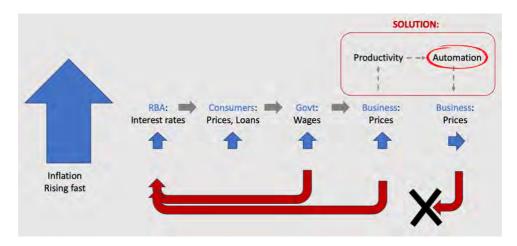
Is there substance to this hype? Yes, here is my rationale.

Consider the economy. *Interest rates* held steady early August, thereby keeping the number of rises since May 2022 to (only!) twelve. Over the same period, *wages* have risen too. In one weekend paper, the AFR published four separate articles on upward wage pressure.



On the same weekend, the AFR published four articles on wage increases

If interest rates and wages both rise, we end up with a virtuous cycle – one pushes up the other.



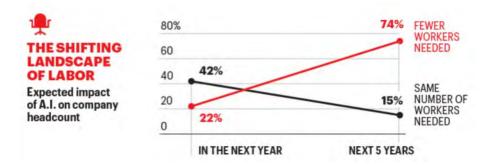
As interest rates rise, Reserve Bank raises interest rates. Government raises wages. Cycle repeats. Solution: Automation – we need to increase productivity and we can do that through automation

How do we get out of this rut? We need to increase *productivity* so that workers produce more for every hour they work. Then it may be possible to stabilise or perhaps lower prices.

- How does an economy or a business increase productivity? Automation.
- What is the tool most likely to help with automation? Al.

For example, Microsoft Copilot doesn't just make it easier for programmers to write code, it enables anyone who can speak English to write code. Bing Chat Visual Search automates image search across almost every internet site and every book ever written in seconds! These are concrete examples of massive productivity enhancements.





Fortune 500 Survey – CEOs expect fewer workers needed - due to impact of AI

In a recent survey of Fortune 500 CEOs, Fortune Magazine found that three-quarters of CEOs expect that A.I. will result in their needing fewer workers in five years—a shift that will create its own social and managerial challenges. LINK

But I still can't get over US\$154 billion, can you?

Maths – square trick

1)
$$106^{2} = 11025$$

 $106+6 = 110$ $6^{2} = 25$
3) $107^{2} = 11449$
 $107+7 = 114$ $7^{2} = 49$
2) $106^{2} = 11236$
 $106+6 = 112$ $6^{2} = 36$

What is **108²**?

Stay connected.

Kevín